

Public Information Meeting

Replacement of Bridge No. 05588

Route 74 over Hockanum River

State Project No. 146-196

Vernon, Connecticut



Design Team

CTDOT Bureau of Engineering and Construction

Contact: Lesgie M. Ruiz

Consultant Liaison: Close, Jensen and Miller, P.C.

Contact: Edward M. Sakl, III, P.E.

Design Engineer: Zuvic, Carr and Associates, Inc.

Contact: John F. Schearer, Jr., P.E.



CTDOT Role and Mission

Bureau of Engineering and Construction

- **Responsible for engineering design, construction and inspection of transportation projects**



Close, Jensen and Miller, P.C. **Consultant Liaison Engineers**

CTDOT has retained the firm of Close, Jensen and Miller to supervise the activities relative to the design of this bridge project.



Zuvic, Carr and Associates, Inc. **Consulting Engineers**

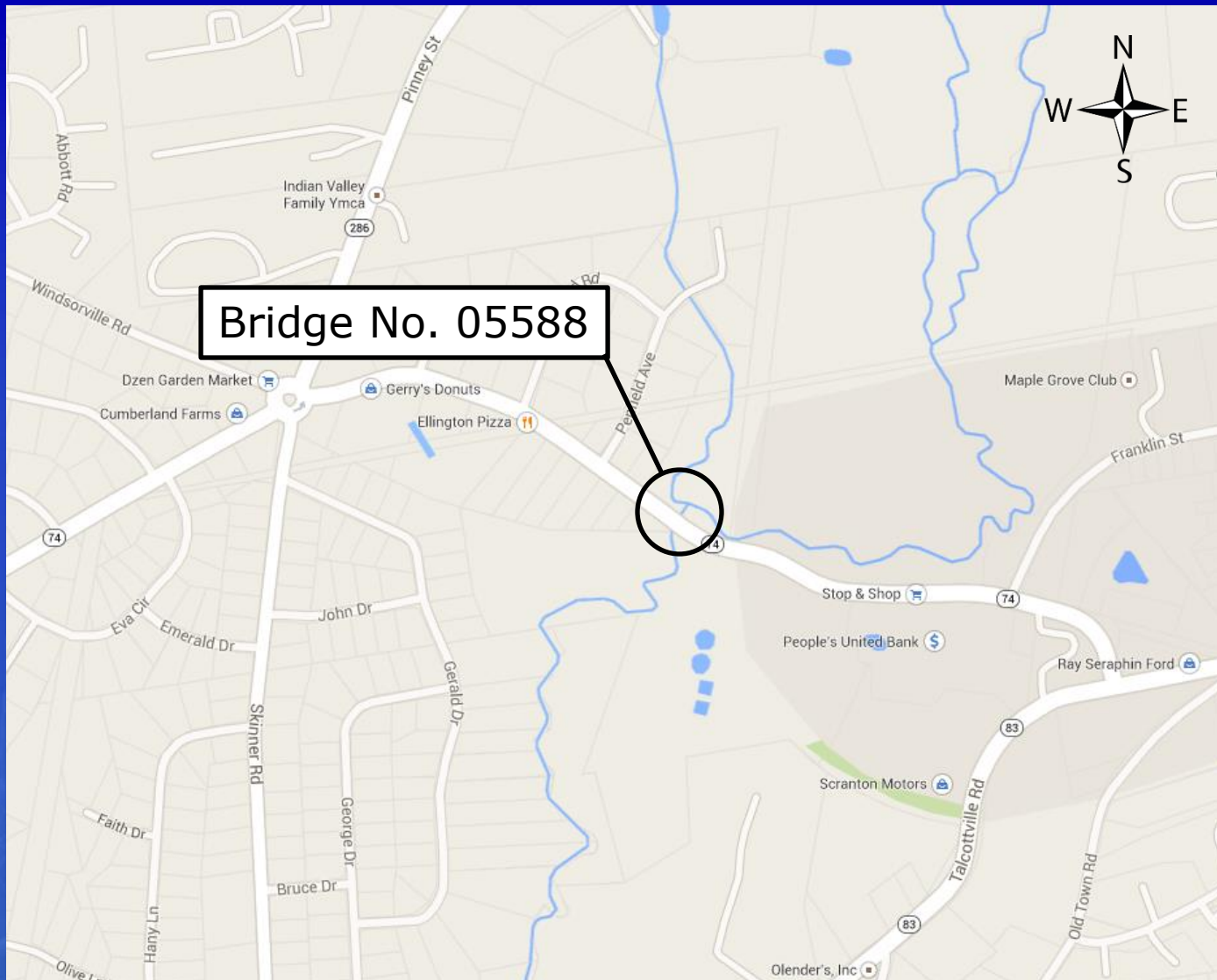
CTDOT retained the firm of Zuvic, Carr and Associates to design the bridge project.



Project Goals

- **Replace the existing bridge**
- **Minimize disturbance to traveling public**
- **Complete construction in a timely manner**
- **Effectively use funds**





Project Location

Connecticut Department of Transportation





Aerial View

Looking North

Connecticut Department of Transportation



Existing Route 74 Bridge

- **Twin corrugated metal pipe arch structure originally built in 1955**
- **Carries two lanes of Route 74 (Windsorville Road) over Hockanum River**
- **Concrete floor and stems supporting corrugated metal pipes**
- **Very narrow roadway (20-foot curb to curb width)**
- **Metal beam guide rail protection**
- **Carries exposed 16-inch water main and buried 8-inch gas main**
- **Significant school bus traffic**
- **No sidewalks**





North Elevation

Looking West

Connecticut Department of Transportation





Route 74

Looking East, Bridge No. 05588

Connecticut Department of Transportation



Reasons for Project



**Deteriorated Condition of Pipe Arches;
Pipe Size not Adequate for Flow**

Reasons for Project



Narrow Roadway

Utility Coordination

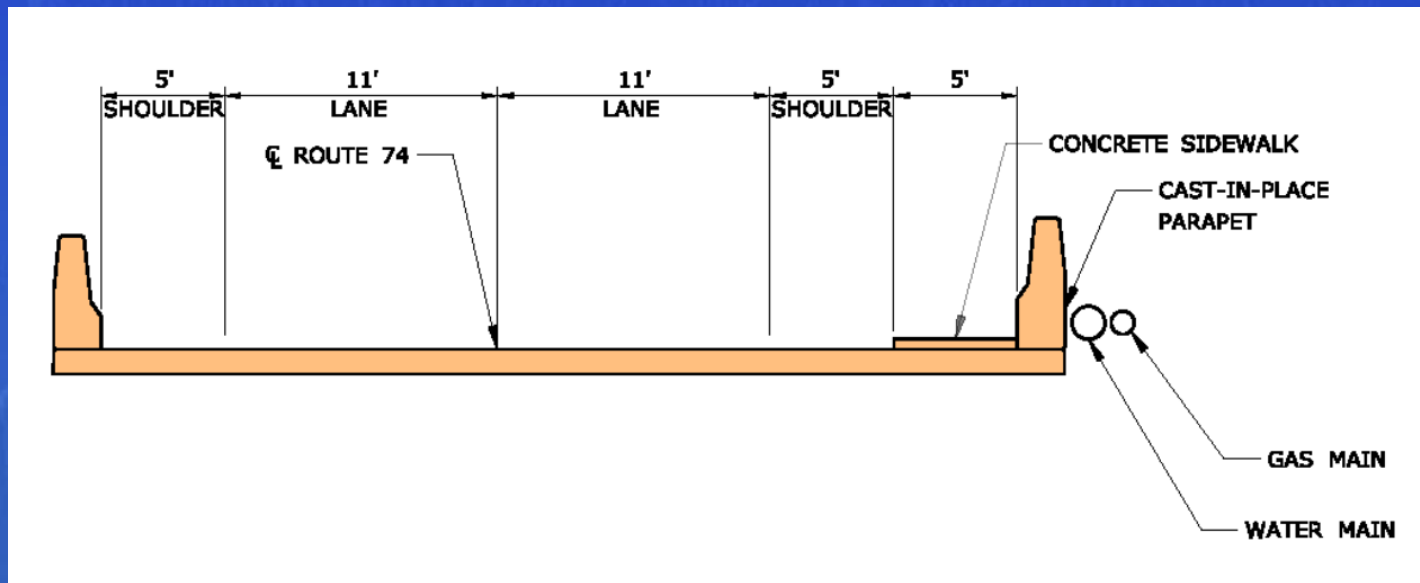
- **Overhead utilities are present at the bridge:**
 - **Telecommunications**
 - **Electrical**
 - **Cable TV**
- **Underground utilities are present at the bridge:**
 - **Natural gas**
 - **Water, above ground at bridge**
- **CJM has notified the appropriate utility companies of the project, an initial coordination meeting with the utilities has been held**



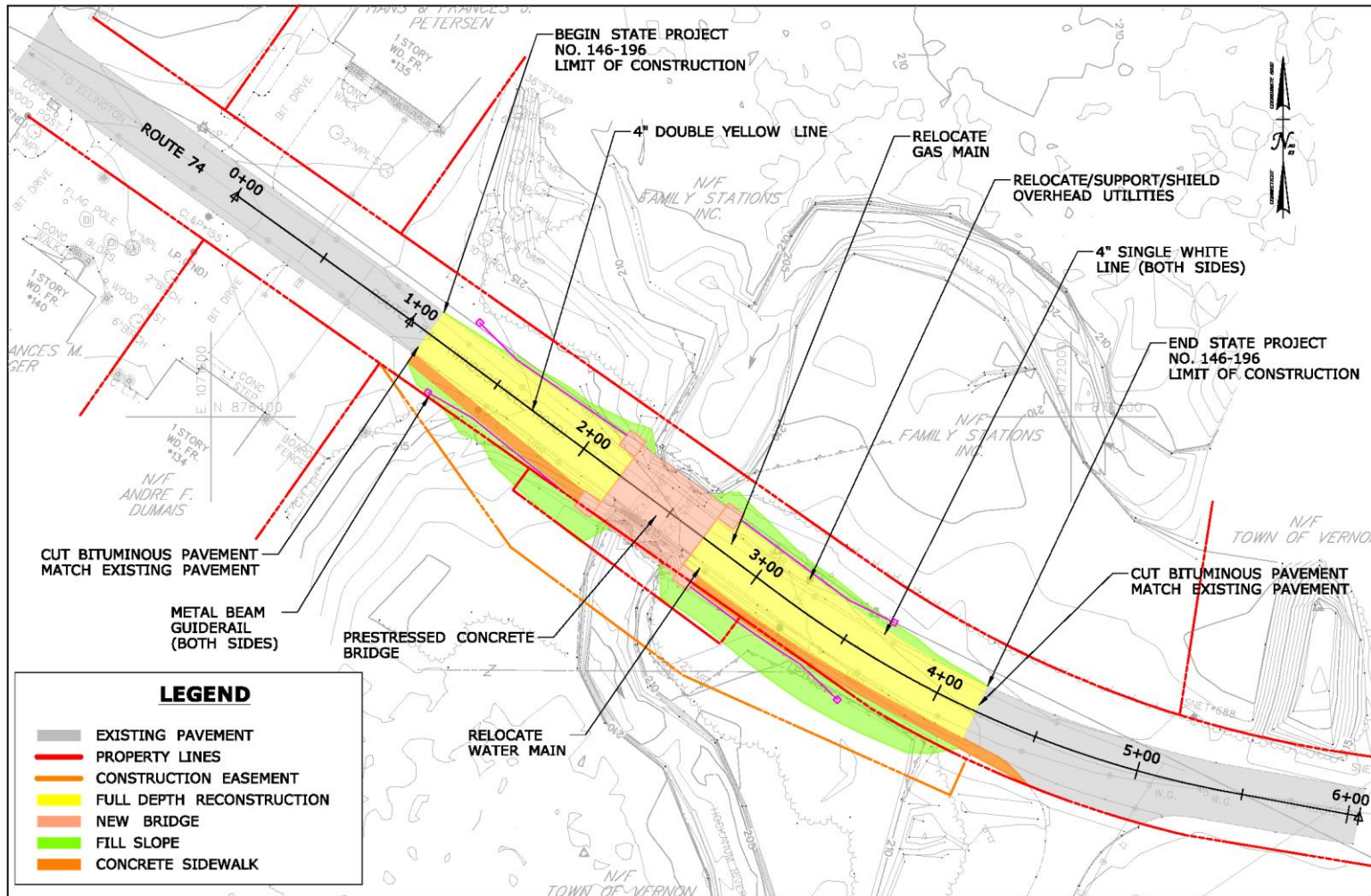
Proposed Roadway

Reconstruction of Route 74:

- **Maintain existing horizontal and vertical alignment**
- **Widen existing 20-foot curb-to-curb width to 32 feet**
- **Construct a 5-foot sidewalk over the bridge on the south side**
- **Hang the water and gas mains from the south parapet**



Proposed Roadway

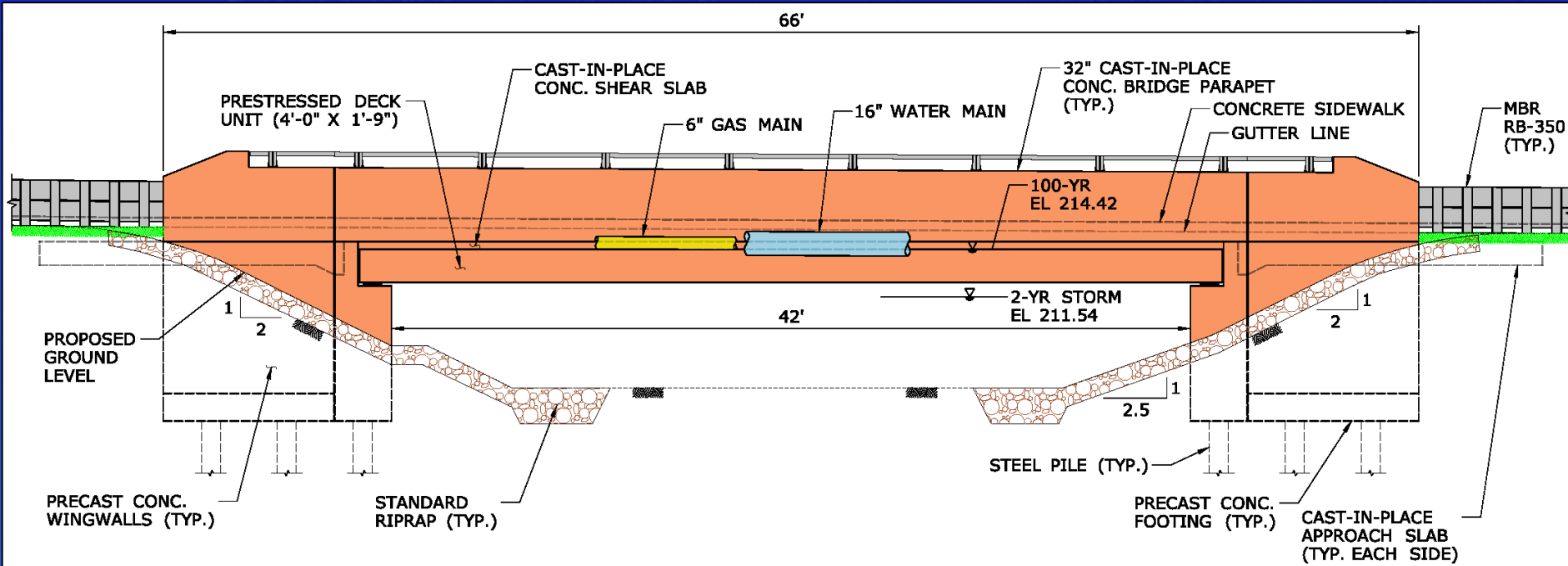


Proposed Replacement

- Accelerated bridge construction techniques
- Precast deck units on precast concrete abutments, and precast wingwalls
- Cast-in-place concrete parapets
- Addition of 5-foot concrete sidewalk on south side of bridge
- Attachment of water and gas mains to south side of bridge
- Repaving of 310 feet of Route 74



Proposed Bridge



*Typical Bridge Elevation
(South Elevation Shown)*

Maintenance & Protection of Traffic

Before the Detour:

- **Relocate and protect overhead utilities**
- **Construct temporary bridge for pedestrians and utilities**
- **Relocate the water main and gas main**
- **Use off-peak lane closures**



Maintenance & Protection of Traffic

Vehicular Detour to Reduce Construction Duration:

- **Bridge closure duration: 7 weeks**
- **Detour: Route 74 (Windsorville Rd.) to Route 286 (Pinney St.) to Windermere Ave. to Route 74/83 (Windsor Ave) to Route 74 (Windsorville Rd.)**
- **Length of detour: 3.5 miles**

After the Detour:

- **Open bridge to traffic. Close shoulders to complete sidewalk, utility and parapet work, if necessary; use standard off-peak lane closure patterns to complete guiderail, paving**

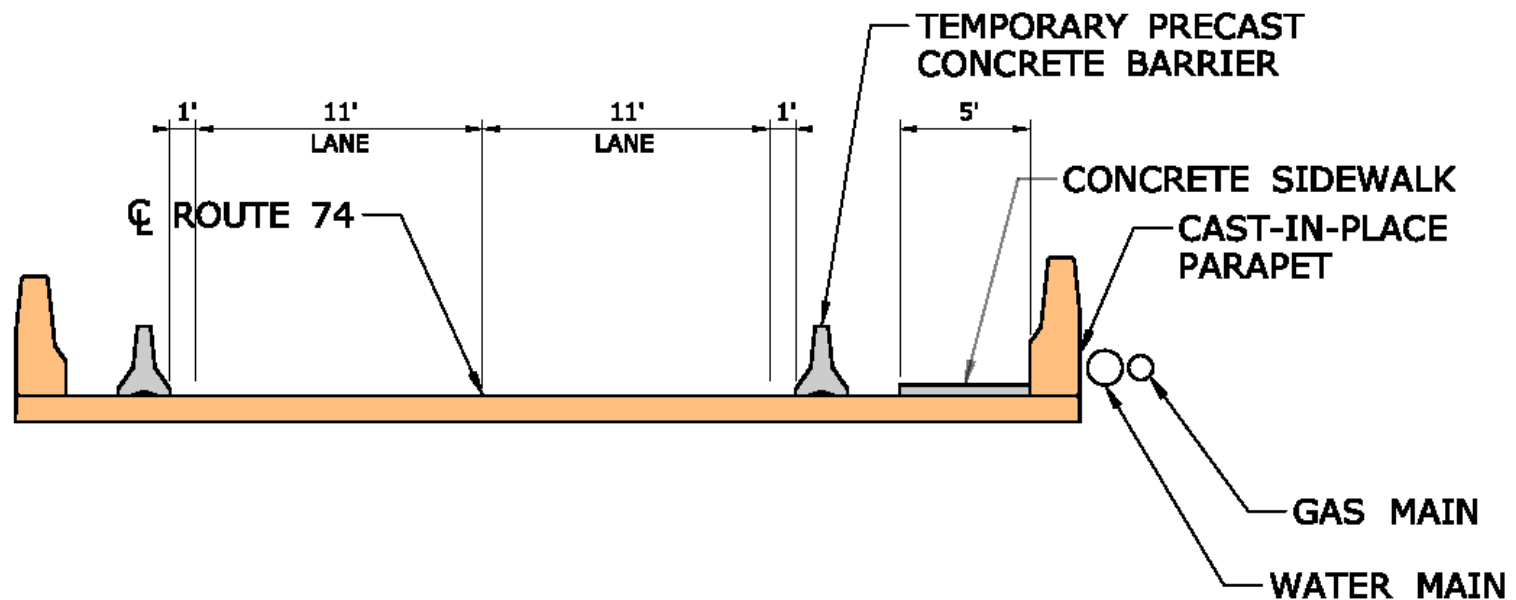


The map displays the project location in the Hagerstown, MD area. A red dashed line outlines a project boundary. A black circle and line point to a specific location on Route 74, labeled "PROJECT LOCATION" in a black box. The map shows various streets including Windermere Ave, Pinney St, Lower Butcher Rd, and Route 74. Landmarks include Santini Conservation Park, Wastewater Services, Inc, and Syn-Mar Products.



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After Detour



Typical Section

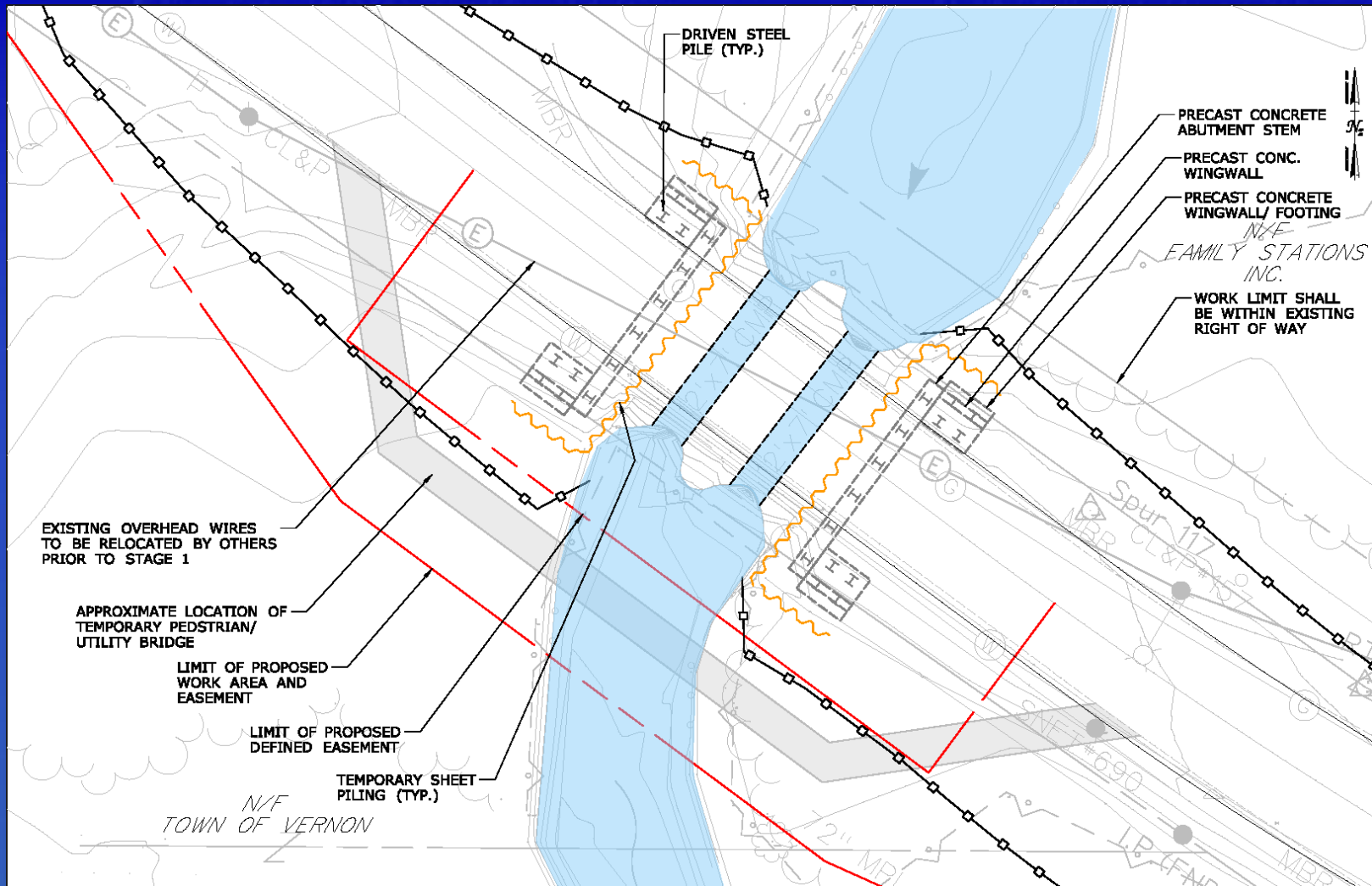
Environmental Permitting

Required Permits:

- **Connecticut Department of Energy and Environmental Protection (CTDEEP) Inland Wetlands and Watercourse Permit**
- **CTDEEP Flood Management Certification**
- **U.S. Army Corps of Engineers / Connecticut Programmatic General Permit**

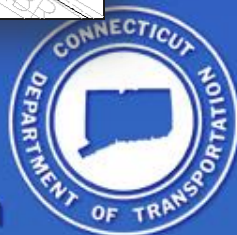


Water Handling Plan

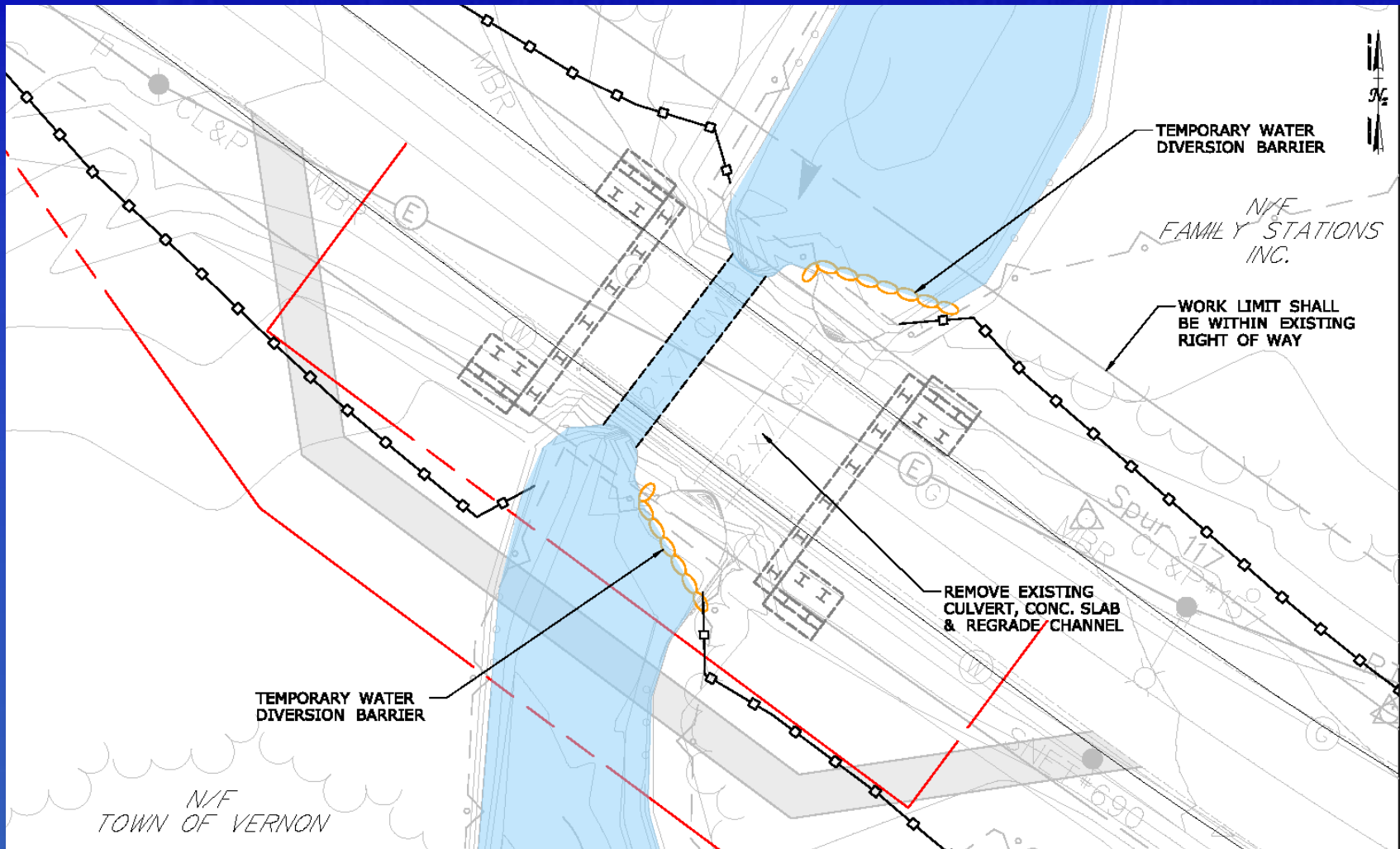


Conceptual Plan

Connecticut Department of Transportation



Water Handling Plan

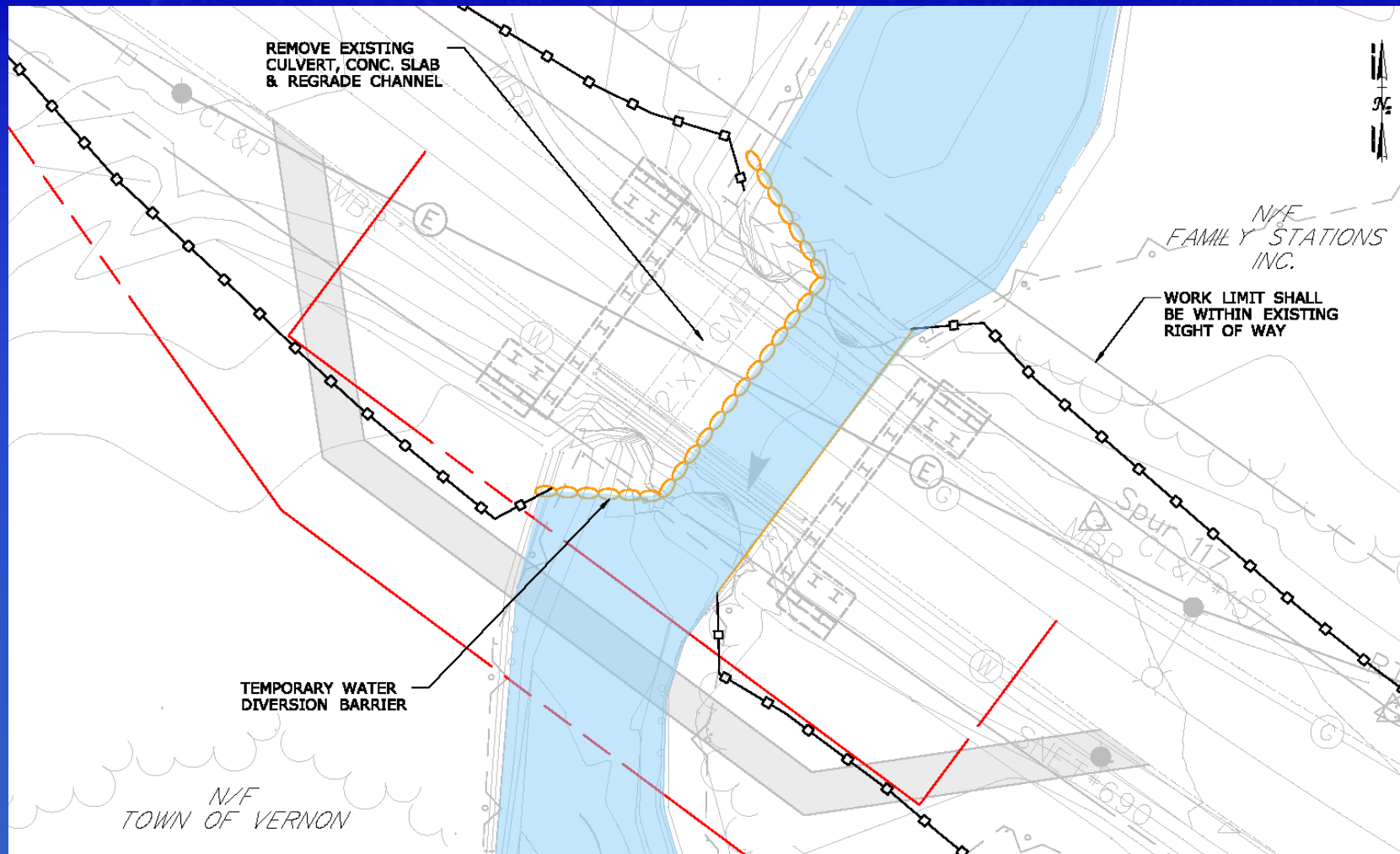


Conceptual Plan

Connecticut Department of Transportation



Water Handling Plan



Conceptual Plan

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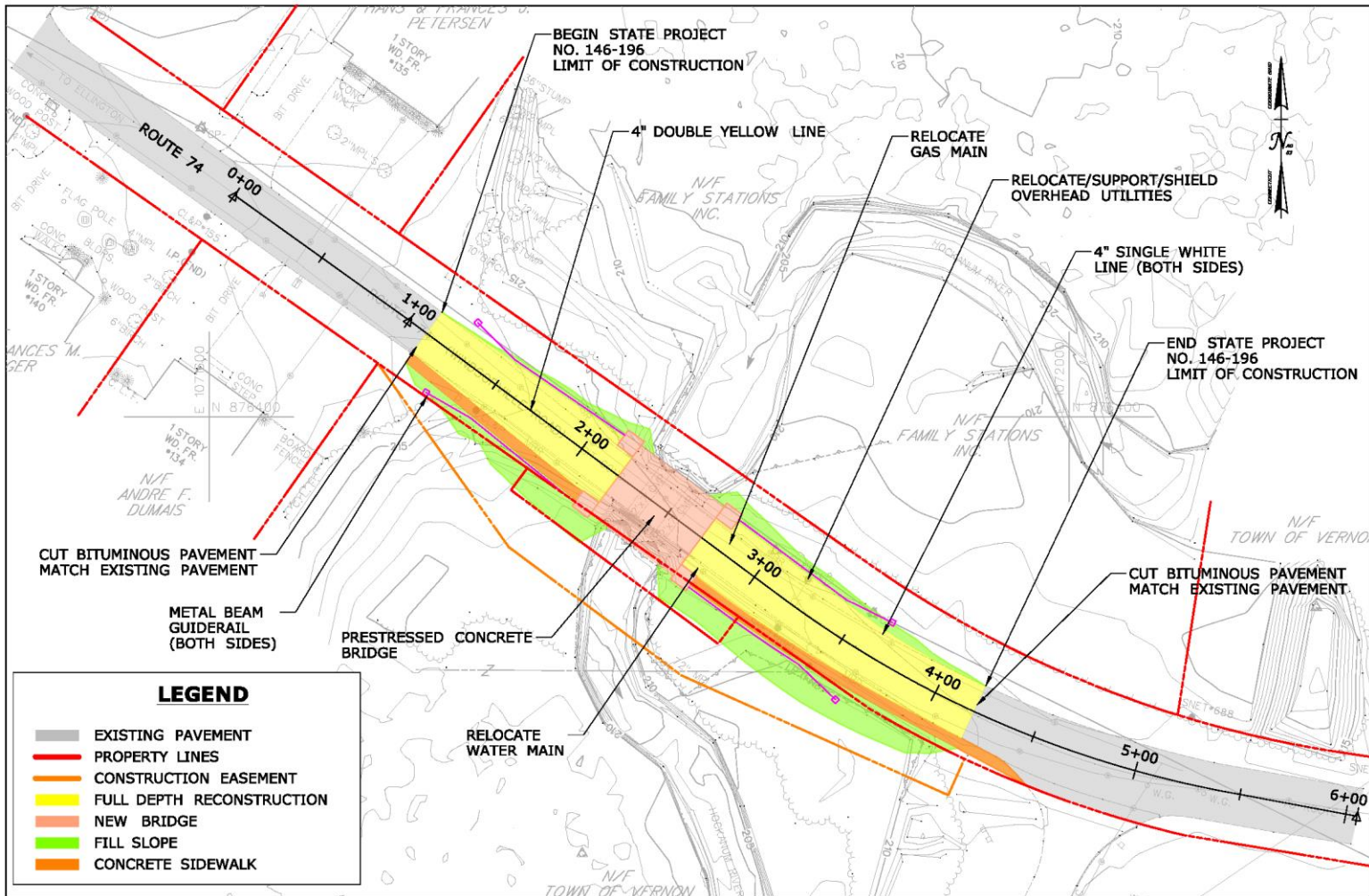


Property Impacts

Construction Easements and Permanent Easements are anticipated for the Town of Vernon Property.



Proposed Roadway



Project Schedule & Cost

Bridge No. 05588: Spring 2015 Construction*

Construction Duration: 5 Months

**\$2,000,000 including incidentals and contingencies
(State funding)**

**** Schedule contingent upon funding and receipt of permits***



Contact Information

- **CTDOT**

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THANK YOU...

FOR YOUR TIME AND ATTENTION

Connecticut Department of Transportation

